

Appl. No. 10/729,301.
Prelim. Amdt. dated November 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1-25. (Cancelled)
26. (Currently Amended) A method for assisting installation of an electrode in a left ventricle of a patient's heart, the method comprising the steps of:
 - a. placing the electrode in a coronary sinus vein branch of the left ventricle;
 - b. detecting a plurality of electrical events in the patient's heart during a heart beat, wherein at least one of the plurality of electrical events is sensed by the electrode; and
 - c. determining from the plurality of electrical events whether the electrode has an anterior or a lateral/posterior vein branch position during the heart beat; and
 - d. ~~displaying on a display screen an indication of the determined position of the electrode.~~
27. (Original) The method of claim 26, wherein the plurality of electrical events include an onset of a QRS complex at the electrode and a peak of the QRS complex at the electrode, wherein determining the vein branch position comprises computing an interval between the onset and the peak, and wherein the indication on the display screen includes displaying the interval and ranges for the interval for each vein branch position.
28. (Original) The method of claim 26, wherein the plurality of electrical events include a right ventricle QRS complex peak and left ventricle QRS complex peak at the electrode, wherein determining the vein branch position comprises computing an interval between the right ventricle QRS complex peak and the left

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ventricle QRS complex peak, and wherein the indication on the display screen includes displaying the interval and ranges for the interval for each vein branch position.

29. (Original) The method of claim 26, wherein the plurality of electrical events include atrial activity and a left ventricle QRS complex peak at the electrode, wherein determining the vein branch position comprises computing an interval between the atrial activity and the left ventricle QRS complex peak, and wherein the indication on the display screen includes displaying the interval and ranges for the interval for each vein branch position.
30. (Withdrawn) A method for installing an electrode of a VRT device in a left ventricle of a patient's heart, the method comprising the steps of:
 - a. placing the electrode in a coronary sinus vein branch of the left ventricle;
 - b. detecting a plurality of electrical events in the patient's heart during a heart beat, wherein at least one of the plurality of electrical events is sensed by the electrode;
 - c. determining from the plurality of electrical events whether the electrode has an anterior or a lateral/posterior vein branch position during the heart beat; and
 - d. adjusting settings used by the VRT device based upon the determined position of the electrode.
31. (Withdrawn) The method of claim 30, wherein the plurality of electrical events include an onset of a QRS complex at the electrode and a peak of the QRS complex at the electrode, and wherein determining the vein branch position comprises computing an interval between the onset and the peak.
32. (Withdrawn) The method of claim 30, wherein the plurality of electrical events include a right ventricle QRS complex peak and a left ventricle QRS complex peak at the electrode, and wherein determining the vein branch position comprises

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computing an interval between the right ventricle QRS complex peak and the left ventricle QRS complex peak.

33. (Withdrawn) The method of claim 30, wherein the plurality of electrical events include atrial activity and a left ventricle QRS complex peak at the electrode, and wherein determining the vein branch position comprises computing an interval between the atrial activity and the left ventricle QRS complex peak.
34. (New) The method of claim 26, further comprising the step of displaying on a screen an indication of said determined anterior or a lateral/posterior vein branch position of said electrode
35. (New) A system for assisting installation of an electrode in a left ventricle of a patient's heart, comprising:
 - a. one or more detection devices for detecting at least first and second electrical events in said patient's heart, one of said one or more detection devices being electrically connected to said electrode and detecting said second electrical event in the left ventricle; and
 - b. a processing device in electrical communication with said one or more detection devices, said processing device configured to calculate a first interval between said first and second electrical events and determining whether said electrode has a lateral/posterior position or an anterior position within the left ventricle of said patient's heart based at least upon said first interval.
36. (New) The system of claim 35, wherein said first electrical event is atrial activity and said second electrical event is a peak of a QRS complex at said electrode.
37. (New) The system of claim 35, wherein said first electrical event is an onset of a QRS complex and said second electrical event is a peak of a QRS complex at said electrode.

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38. (New) The system of claim 35, wherein said first electrical event is a peak of a right ventricle QRS complex occurring before or after the second electrical event and said second electrical event is a peak of a QRS at said electrode.
39. (New) The system of claim 35, further comprising a second electrode that is adapted to be positioned in an atrium area of said patient's heart, one of said one or more detection devices being electrically connected to said second electrode and is adapted to detect said first electrical event in said atrium area prior to detection of said second electrical event, and wherein said second electrical event is a left ventricle QRS complex peak.
40. (New) The system of claim 35, further comprising a second electrode that is adapted to be positioned in a right ventricle area of said patient's heart, one of said one or more detection devices being electrically connected to said second electrode and is adapted to detect said first electrical event in said right ventricle area before or after detection of said second electrical event, and wherein said first electrical event is a right ventricle QRS complex peak and said second electrical event is a left ventricle QRS complex peak.
41. (New) The system of claim 35, wherein said electrode detects said first electrical event, said first electrical event being an onset of a left ventricle QRS complex, and wherein said second electrical event is a left ventricle QRS complex peak.
42. (New) A method for assisting installation of an electrode in a left ventricle of a patient's heart, said method comprising the steps of:
 - a. placing said electrode in a coronary sinus vein branch of said left ventricle;
 - b. placing a second electrode in an atrium region or in a right ventricle area;

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- c. detecting a plurality of electrical events in said patient's heart during a heart beat, wherein at least one of said plurality of electrical events is sensed by said electrode;
- d. determining from said plurality of electrical events whether said electrode has an anterior or a lateral/posterior vein branch position during said heart beat; and
- e. displaying on a screen an indication of said determined anterior or a lateral/posterior vein branch position of said electrode wherein detecting said electrical events comprises detecting a first depolarization and a second depolarization event within said heart.

43. (New) The method of claim 42, wherein the step of determining whether said electrode has an anterior or a lateral/posterior vein branch position during said heart beat comprises:

- a. measuring an interval between said first depolarization event and said second depolarization event; and
- b. comparing said interval to a threshold and determining a lateral/posterior position when said interval is greater than said threshold.

44. (New) The method of claim 42, wherein said first depolarization event is detected by sensing depolarization at said second electrode in said atrium region.

45. (New) The method of claim 42, wherein said first depolarization event is detected by sensing a peak of a QRS complex at said second electrode in said right ventricle area.

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Please charge any additional fees or credit any overpayment to Deposit
Account No. 13-2725.

Respectfully submitted,

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